

**SAVANNAH HARBOR EXPANSION
PROJECT MANAGEMENT PLAN**



APPENDIX O

QUALITY CONTROL PLAN



**US Army Corps
of Engineers** ®
Savannah District



QUALITY CONTROL PLAN

SAVANNAH HARBOR EXPANSION PROJECT



WRDA '99 POST-AUTHORIZATION TIER II ENVIRONMENTAL IMPACT STATEMENT & GENERAL REEVALUATION REPORT

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SHE PMP Appendix O

Page 1 of 23 total pages

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Last Revised by: Douglas H. Plachy

Rev D

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II. INTRODUCTION

This plan provides for the Quality Control process and technical review activities for the Savannah Harbor Expansion project, Georgia and South Carolina, General Reevaluation Report (GRR) and Tier II Environmental Impact Statement (EIS). The procedures that will be employed to insure compliance with all technical and policy requirements through the development of the GRR and Tier II EIS are described in this QC plan. Although the procedures outlined in this plan are generally reflected in the body of the Project Management Plan (PMP), this specific document is intended to accompany and be incorporated as an attachment to the PMP.

III. AUTHORITY AND GUIDANCE

This QC plan has been accomplished in accordance with the following:

- A.** DR 5-1-2, **CESAS-PM, 20 May 02, subject:** Management – Quality Management Plan
- B.** ER 5-1-11, **CECS, 17 Aug 01, subject:** USACE Business Process.
- C.** ER 1105-2-100, **CECW-P, 22 Apr 00, subject:** Planning Guidance Notebook.
- D.** ER 1110-1-12, 1 Jun 93, **subject:** Quality Management.
- E.** AR 5-1, 15 Mar 02, **subject:** Total Army Quality Management.
- F.** Interim Draft ER (unnumbered), **CEMP/CECW, 13 Apr 00, subject:** Quality Management
- G.** EC 1165-2-203, CECW-A, 15 Oct 96, Water Resources Policies and Authorities, Technical and Policy Compliance Review (**historical purposes only**).
- H.** CECW-A Policy Memorandum No. 2, 6 Apr 95, **subject:** Civil Works Decision Document Review Policy Guidance.
- I.** CECG/AASA(CW) Joint Memorandum, 31 Mar 95, **subject:** Technical Review Process.

IV. QUALITY CONTROL OVERVIEW

- A.** The Savannah District is responsible and accountable for the quality of its projects and products. Feasibility-type studies, such as a GRR, provide the technical

basis for the baseline project cost estimate, and are critical for consummation of a Project Cost-sharing Agreement (PCA) and in obtaining project authorization.

B. The objective of quality control is to:

1. Provide quality technical products by providing an effective, comprehensive technical review as a basis for decision making.
2. Verify functional, legal, safety, health, and environmental requirements are met.
3. Achieve cost-effective solutions consistent with product requirements.
4. Obtain process efficiency by integrating technical review throughout product development.
5. Document issues/concerns.
6. Assure accountability for the technical quality of the product.
7. Avoid start-overs and redesign.
8. Provide continued development of District technical expertise.
9. Achieve a seamless review process that includes early identification and resolution of both technical and policy issues.

V. QUALITY CONTROL CONCEPT

A. Specific measures will be utilized, in addition to the overall quality control provided through chain-of-command review and supervisory guidance, to evaluate progress and ensure compliance with current policy and procedures.

1. Overall Progress — The overall progress of the study effort will be measured through several means including Planning Division, Programs and Project Management Division, and other District work plans, individual study schedules, and budget milestones. District work plans will be reviewed on a monthly basis to identify any changes to the resources designated for any portion of the study. Any changes will be analyzed for their impact upon other critical functions as well as the completion date of the project. Significant impacts will be elevated to higher administrative levels to coordinate impacts and ensure minimal effect on the study.
2. Project Review Board — Progress reports will be made monthly to

the District Project Review Board (PRB). Early decisions on competing resources and priorities will be addressed in the forum as well as upward reporting to the South Atlantic Division and HQUSACE via normal PRB procedures.

3. Project Delivery Team Meetings — The PDT is an organized multi-agency, multi-disciplinary group, consisting at least of the affected functional elements in the district. Under team management, the Project Manager will coordinate with the other functional managers and technical staff on the PDT. The study management will ensure that the study accomplishes the established goals at the anticipated rate, and that all items of the study schedule are accomplished. Refer to Appendix A of the PMP.

4. Issue Resolution Conferences — Review meetings and conferences will be held to maintain continuous support and guidance from higher review levels within USACE. Two specific issue resolution conferences (IRCs) are presently expected to be conducted.

5. Technical Review Conferences — A Technical Review Conference (TRC) will be held to review ongoing studies and ensure future studies are on-track. The primary purpose of the TRC is to resolve issues, which will affect schedules and costs for the remaining study period. Field investigations and design studies prior to this conference will be reviewed for appropriateness and progress. Guidance on the TRC is contained in “Engineering and Design for Civil Works Projects,” ER 1110-2-1150, dated 31 Mar 94.

6. The General Reevaluation Scoping Meeting (GRSM) will be convened early in the study to provide feedback to the PDT from the South Atlantic Division, HQUSACE, and the Office of the ASA(CW). In addition, appropriate Federal and non-Federal agencies shall be invited to participate in the GRSM. This meeting is to ensure that the general reevaluation studies are focused and tailored to meet specific objectives, and focus the General Reevaluation Study on key alternatives, to further define the depth of analysis required and to refine study/project constraints. Accordingly, the PMP may require revision to document changes agreed to at the GRSM. The revised PMP will then form the basis for subsequent conduct and review of the General Reevaluation Report/Tier II Environmental Impact Statement.

7. The Alternative Formulation Briefing (AFB) will be used to provide feedback to the PDT from the South Atlantic Division, HQUSACE, and the Office of the ASA(CW). In addition, appropriate Federal and non-Federal agencies shall be invited to participate in the AFB. The AFB will be scheduled when the PDT has identified a selected plan and is prepared to present the formulation and evaluation of alternatives. The Washington level participants will seek to confirm that the plan

formulation and selection process, the identified preferred plan, and definition of Federal and non-Federal responsibilities, conform to current policy guidance. The goal is to identify and resolve any policy concerns that would otherwise delay or preclude approval of the draft report.

8. Feasibility Review Conference — A third IRC, the FRC, is also scheduled to be held just prior to release of the draft report to the public; however, this may be waived if no major issues are identified in the AFB.

B. Multi-discipline and Multi-layer Technical Review — The technical review will be accomplished to assure conformance with Corps technical requirements. Careful coordination and integration of planning, economics, environmental, and plan formulation with engineering, real estate, and technical considerations during this phase are imperative. Technical Review is a check of a product that focuses on compliance with established policy, principles, and procedures using clearly justified and valid assumptions. It includes the verification of assumptions, methods, procedures, and material used in analyses based on the level of data obtained, alternatives evaluated, appropriateness of data used and the level of data obtained, functionality of the product and verifies the reasonableness of the results including whether the product meets the project needs consistent with law and existing policy and engineering and scientific principles.

C. Independent Technical Review (ITR) — A review by a qualified person or team, not affiliated with the development of a project/product, for the purpose of confirming the proper application of clearly established criteria, regulations, laws, codes, principles, and professional procedures.

D. Independent Technical Review Team (ITRT) — An ITRT will be formed from qualified individuals in corresponding specialties within the South Atlantic Division and other USACE districts, laboratories, centers of expertise, and contracted and/or consultant. Selection of the appropriate individual and/or organization to review a specific decision document, report, and/or study will be made by the technical review team leader in coordination with the technical review team coordinators based upon cost, timeliness, technical capabilities, and project need from one of the following five resources:

1. The “Within District” alternative identifies a reviewer through the lead functional chief. This alternative will use existing senior technical staff that perform other technical work but are not involved in the technical products under review.

2. The “Other Districts within the Division” alternative involves review work by personnel in one of the other four South Atlantic Division districts (other

than the Savannah District). These districts are the most familiar with navigation within the Southeast United States.

3. The “Other Districts Outside the Division” alternative involves review by personnel in a USACE district outside of the South Atlantic Division. This alternative may be necessary when workload at other districts within the division preclude their taking on additional work effort and/or in order to obtain specialized expertise not available at all districts.

4. The “Centers of Expertise” alternative involves review by USACE personnel at one of the Engineering Research Development Centers and is considered as an excellent source of technical expertise when appropriate.

5. The “Contracted and/or Consultant” alternative would utilize outside expertise, other Federal and/or State agencies, academia and individuals. This alternative may be obtained via a Savannah District contract or via a contract through another USACE district.

E. The objectives of the ITRT is as follows:

1. Insure quality technical products by providing an effective, comprehensive technical review as a basis for decision-making.
2. Verify that functional, legal, safety, health and environmental requirements are met.
3. Achieve cost effective solutions.
4. Obtain process efficiency by integrating technical review throughout product development.
5. Document issues and concerns.
6. Assure accountability for the technical quality of the product.
7. Minimize lost effort and redesign.
8. Provide continued development of Corps technical expertise.
9. Achieve a seamless review process that includes early identification and resolution of both technical and policy issues.

F. Documentation

1. Technical Review Comments

2. Technical Review Responses
3. Technical Review Annotations
4. Statement of Technical And Legal Review

G. Checklist — A quality control checklist, similar to that shown on page 8 to this plan, shall be used to ensure that all items were systematically addressed.

H. Team Formation Process

1. The PM has the PDT begin the Tier II EIS/GRR effort.
2. The Chief(s), Planning Division, Engineering Division, Real Estate Division, and Operations Division each appoints a technical review team coordinator for their respective Organization. The Chief, Civil Works Programs and Project Management Branch will appoint a technical review team leader. The technical coordinators should be at a minimum a section-level chief. The technical review team leader should be at a minimum a branch-level chief.
3. The technical review team leader, via the technical review team coordinators, requests review team member recommendations from the appropriate branches, sections, and offices. If at all possible, the review team members shall be from a center of expertise and/or other district to ensure independence.
4. The technical review team reviews the pre-performance planning documentation including the Project Management Plan (PMP) and this Quality Control Plan (QCP). They document any concerns in writing and will provide them to the technical coordinators.
5. The technical review team leader consolidates the concerns from the technical coordinators and provides them to the USACE PM. The documented concerns/comments are then distributed to all of the PDT members.
6. An initial technical review meeting is held by the technical review team leader to discuss the comments and develop responses. The USACE PM documents the discussion in a memorandum for record (MFR) that incorporates the comments and responses.
7. The USACE PM distributes the MFR to all meeting attendees, their supervisors and the remainder of the PDT. Once formalized, the USACE PM files the MFR to document the technical review process.
8. At least one, and perhaps more, in-progress technical review team

meetings are held during the study process. Prior to these meetings each member of the PDT prepares a progress report on their assigned work. The USACE PM consolidates these progress reports and provides them to the technical review team leader who distributes them to the technical review team as appropriate.

9. The technical review team provides written comments documenting any concerns. These comments are consolidated by the technical review team leader and distributed to the PDT through the USACE PM.

10. An in-progress technical review meeting is held to discuss the comments and develop responses. The USACE PM incorporates the comments and responses and documents the meeting in an MFR.

11. If the technical review team and the PDT are unable to resolve any concern the USACE PM will immediately initiate the dispute resolution process described Section XII Paragraph F of the SHE PMP.

12. Once all issues are resolved, the USACE PM distributes the memorandum for record to all meeting attendees and their supervisors and the remainder of the PDT. Once it is formalized, the USACE PM files the memorandum for record to document the technical review process.

13. After each technical review meeting the PDT will determine if revisions to the study schedule or budget are required.

14. Draft Report:

a) A technical review meeting is held to review the consolidated draft report. The USACE PM will deliver this document to the PDT in a timely manner, allowing at least two weeks for review.

b) Each member of the technical review team will read the entire draft Tier II EIS/GRR. The review process will be similar to that described above, however in the vast majority of cases, major issues will be resolved prior to this time.

c) Once the review of the draft Tier II EIS/GRR is complete, the technical review team members will sign the Certification of Technical Review and return it via their Technical Coordinator to the Technical Team Leader. The Division Chiefs will approve the technical review and the Office of Counsel will sign the Certification of Legal Review when such certification is required.

15. Final Report:

a) A final technical review meeting is held to review the final Tier II EIS/GRR and supporting documents. The USACE PM will deliver these documents to the PDT in a timely manner, allowing at least two weeks for review.

b) Each member of the technical review team will read the entire final Tier II EIS/GRR and supporting documents. The review process will be similar to that described above, however in the vast majority of cases, major issues will be resolved prior to this time.

c) Once the review of the final Tier II EIS/GRR and supporting documents is complete, the technical review team members will sign the Certification of Technical Review and return it via their Technical Coordinator to the Technical Team Leader. The Division Chiefs will approve the technical review and the Office of Counsel will sign the Certification of Legal Review when such certification is required.

16. The USACE PM and Office of Counsel will maintain a file containing copies of all documents pertaining to the technical review. The USACE PM file may be inspected by the Technical Team Leader, the Chief, Civil Works Programs and Project Management Branch, as well as representatives of South Atlantic Division performing their quality assurance function.

VI. CERTIFICATIONS

A. ITR Certification — Upon completion of the ITR process, each team member, the team coordinators, and the technical team leader will each document and sign a “certification of independent technical review.” A sample copy of this certification is located at the back of this plan.

B. Certification of Legal Review — Office of counsel will provide a certification upon completion of the legal review.

C. Policy Compliance Review Certification — All decision documents that receive a policy compliance review will be formally documented in accordance with DR 5-1-2.

VII. ENDORSEMENTS BY THE OFFICE CHIEFS

A. District Commander

B. Chief, Programs and Project Management Division

C. Chief, Planning Division

- D.** Chief, Engineering Division
- E.** District Counsel
- F.** Chief, Operations Division
- G.** Chief, Contracting Division
- H.** Chief, Real Estate Division

VIII. PARTICIPATION BY THE NON-FEDERAL INTEREST

A. The Georgia Ports Authority as well as the three Federal Cooperating Agencies on the SHE Project, shall provide input to be used to monitor the quality process and the PDT shall consider their feedback as a quality indicator.

IX. UPDATING OF THE QCP

A. In accordance with DR 5-1-2, whenever there are significant changes in the project the QCP shall be appropriately modified.

X. SAMPLE QUALITY ASSURANCE/QUALITY CONTROL CHECKLIST

A. Formulation.

1. Will alternatives function safely, reliably, and efficiently, and are they engineeringly sound?
2. What is the without-project condition and what are the assumptions upon which it is based?
3. Are the key assumptions underlying the predicted with-project conditions documented and justified as the most likely parameters?
4. What alternatives, including different performance levels, have been considered?
5. What is the rationale for screening out the alternatives that were not selected for implementation?
6. What beneficial and adverse effects have been evaluated for the alternative plans that are studied in detail?
7. Does risk and/or uncertainty inherent in the data or in the various

assumptions of future economic, demographic, social, and environmental trends, have a significant effect on plan formulation?

8. What are the assumptions regarding future conditions associated with the alternatives?

9. What coordination has occurred with State, local, and Federal agencies, and how have their views been considered in formulating the recommended plan?

B. Plan Selection.

1. Is the selected plan the NED (or most cost effective) plan?

2. If a departure from the NED (or most cost effective) plan is being recommended, what is the rationale to support the recommended departure?

3. How do the benefits and costs of the NED (or most cost effective) plan compare to other candidate plans?

4. Are there any international implications of the project, and if so, how have they been addressed?

5. Are there any legal or institutional obstacles to project implementation, and if so, how have they been addressed?

6. Does the Federal Power Agency indicate the marketability of the power produced based on the selected plan?

C. Economic Feasibility.

1. What discount rate, price level, and amortization period were used to determine annual benefits and costs?

2. What procedures were used to evaluate NED benefits?

3. What are the bases for the economic projections?

4. What separable features have been incrementally economically evaluated, and what are the separable B/C ratios?

5. Have all anticipated project outputs, monetary and non-monetary, positive and negative, been included in the economic evaluation? If not, what outputs were omitted and why?

6. What is the B/C ratio of the project and separable elements based

on existing benefits?

7. What contingency allowances were used for major cost items and what is the basis for them?

8. What engineering and design, and supervision and administration charges were included in the estimate, and what is the basis for them?

9. What items are included in annual OMRR&R costs, and how were they developed?

10. Was interest during construction documented?

D. Environmental Evaluation.

1. What studies and coordination were conducted in accordance with National Environmental Policy Act of 1969 (NEPA) and other applicable environmental laws?

2. What studies were conducted to determine if there are potential or actual contaminated lands (hazardous and toxic wastes, pollutants, etc.) included in the land requirements?

3. What preservation, conservation, historical, and scientific agencies and interests were consulted, what were their views, and how were their views considered during plan formulation?

4. What incremental analysis was performed to determine the scope of the fish and wildlife mitigation plan?

E. Environmental Design Considerations.

1. Is the project designed to be in concert with the environment and the sponsor and public views concerning the environment?

2. Overall, is this project environmentally sound? To what degree does this project add or detract from the environment?

F. Engineering Appendix.

1. Is there an engineering appendix to the feasibility report or similar section in other decision documents in accordance with ER 1110-2-1150?

2. Does the report document that the cost estimate will remain relatively stable based on the engineering effort contained in the engineering appendix?

3. Does the report document the design with clear references and assumptions?

4. Has design criteria for the project been established and does it include functional requirements, local sponsor requirements, technical design, and environmental engineering considerations?

5. If appropriate, has the U.S. Coast Guard been contacted to determine requirements for permits for any structures to be constructed or relocated over a navigable waterway?

6. If no DM is to be prepared, does the engineering appendix provide a comprehensive discussion and complete documentation of the completed design?

G. Hydrology and Hydraulics.

1. Is the analysis based on current hydraulic, hydrologic, and climatic data?

2. Does the report provide the hydraulic and hydrologic studies necessary to establish channel capacities, structure configurations, interior flood control requirements, residual or induced flooding, etc.?

3. Have required physical and numerical modeling, including ship-simulation investigations, been performed in accordance with current guidance? If numeric modeling or other studies required by regulation are not to be performed, is the rationale for omitting these efforts documented and has the appropriate approval been obtained?

H. Surveying and Mapping.

1. Does the report provide topographic maps to support the level of detail required to eliminate possibility of large quantity errors?

2. Has suitable site-specific mapping been accomplished during PED?

3. Has the report met the requirements listed in the table of required actions in ER 1110-1-8156 (Policies, Guidance, and Requirements for Geospatial Data and Systems) ?

I. Geotechnical.

1. Does the report document that a site investigation, subsurface explorations, testing and analysis been accomplished and present geotechnical

information to support the type of project, foundation design, structural components and availability of construction materials?

2. Does the report address any special construction features or procedures (dewatering, stage construction, etc.) and are they included in the estimate?

3. Does the report provide the level of design necessary to document the cost estimate?

J. Structural Design.

1. Does the report clearly present the results of alternatives needed to support the selected project site, configuration, and features, including main structures and major appurtenances?

2. Does the report document the comparison of alternatives in sufficient detail to establish a realistic comparison of costs?

3. Have appropriate additional studies or tests planned for later phases of the design been identified?

K. Hazardous, Toxic, and Radioactive Waste.

1. Have HTRW areas been identified and the project designed to avoid HTRW?

2. If HTRW cannot be avoided, have investigations been conducted by an approved HTRW design district to establish the type and extent of HTRW contamination and the impact and cost of needed response action?

L. Construction Materials and Procedures.

1. Have potential sources and suitability of construction material for concrete, earth and rock borrow, stone slope protection; and for disposal sites been identified?

2. Have preliminary construction procedures, construction sequence and duration, and a water control plan for each step of the proposed plan, been developed?

3. Have construction equipment and production rates been determined for major items, in support of the work schedule and cost estimate?

M. Operation, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R).

1. Has an OMRR&R plan been developed for the project, and does it include detailed estimates of the Federal and non-Federal costs?

2. Are budgets and schedules for the preparation of the necessary OMRR&R manuals included?

3. Does the report include a discussion of primary and emergency power supplies based on local availability and reliable sources?

N. Cost Estimate and Schedule.

1. Has the current working estimate supporting the NED plan been prepared using MCACES software and is it in Civil Works Breakdown Structure?

2. Is the baseline estimate the fully funded project cost estimate and is it developed for the recommended scope and schedule established in the report?

3. Does the estimate include all Federal and non-Federal costs for lands and damages, all construction features, planning, engineering and design and supervision and administration along with the appropriate contingencies and inflation associated with each of these activities through project completion?

4. Do the contingencies reflect the risks related to the uncertainties or unanticipated conditions identified by the data and design detail available at the time the estimate was prepared?

5. Is the final product a reliable, accurate cost estimate that defines the local sponsors obligations and supports project authorization within the established laws and regulations?

O. Value Engineering (VE).

1. For projects with estimated cost of \$2,000,000 or greater, has a Value Engineering Study been completed or is there a cost estimate and schedule for the study?

2. If the district determines a VE study is not cost effective, has a formal waiver request been approved by the division commander, and has a copy of the approved waiver been forwarded to CEMP-EV?

P. Real Estate.

1. Does the decision document contain a comprehensive Real Estate Plan (REP) that describes the real estate requirements needed to support all project purposes?

2. Does the report provide a complete real estate cost estimate?
3. Does the report document the thorough investigation of facility/utility relocations?
4. Does the report provide the “Assessment of Non-Federal Sponsor’s Real Estate Acquisition Capability” checklist of the Non-Federal Sponsor’s legal and professional capability to acquire and provide all project lands, easements and rights-of-way in a timely fashion?
5. Does the report provide a suitable acquisition and related real estate schedule?

Q. Cost Sharing and Local Cooperation Requirements.

1. What project purposes are addressed by the selected plan and how have costs been allocated to them?
2. If recreation or fish and wildlife enhancement are included in multiple-purpose projects, has the appropriate letter of intent from the non-Federal sponsor been obtained in accordance with Public Law 89-72?
3. What documentation is available to assure that local interests fully understand and are willing and capable of furnishing the local cooperation specified?
4. How was the apportionment of cost to local interests calculated?
5. Who are the beneficiaries of the project and are there special circumstances associated with the project that warrant consideration of increased non-Federal cost sharing?
6. If the non-Federal sponsor is relying on non-guaranteed debt (e.g. a particular revenue source or limited tax, or bonds backed by such a source) to obtain remaining funds, what information is available to demonstrate the financial capability of the non-Federal sponsor and that the projected revenues or proceeds are reasonably certain and are sufficient to cover the sponsor's stream of costs through time?
7. If the non-Federal sponsor is relying on third party contributions, is data available from the third party to insure financial capability and its legal commitment to the sponsor?
8. Does the decision document contain a complete list of relevant Items of Local Cooperation?

R. Project Authorization.

1. If the document is pre-authorization, have all elements necessary for congressional authorization been included in the report?
2. If the decision document is postauthorization, is it in keeping with the project authorization?
3. If not, is further authorization to be requested of Congress?

S. Technical and Legal Review.

1. Has documentation of significant issues and possible impact; and their resolution been provided?
2. Has certification of technical / legal review been provided?

T. Budget and Appropriation Decision.

1. Is the document consistent with previous Washingtonlevel decisions on the budget and on Congressional adds; including decisions on project or study scope, non-Federal participation, and cost-sharing?

U. Additional Miscellaneous Questions.

1. Has the study been conducted in accordance with and is it fully responsive to the study authority?
2. Is the study area, as defined, reasonable and consistent with the study authority?
3. Have the real extent and severity of the water-resources problems and without-project conditions been clearly documented?
4. Are current findings consistent with prior phases of study? Have intervening external factors (such as regulation changes, significant storm events, etc.) jeopardized previous logic, analyses and conclusions?
5. Have the assumptions and rationale for the without-project condition been explicitly stated and are they reasonable?
6. Are planning objectives clearly identified?
7. Were the views of non-Federal interests solicited and considered in the plan formulation process?
8. Have all reasonable structural and non-structural plans been considered? Do they fully address the identified problems and needs?

9. Was the plan formulation analysis conducted in accordance with accepted techniques and appropriate guidelines and regulations?
10. Was the environmental work conducted in accordance with appropriate techniques, guidelines and regulations?
11. Was the economic/benefit analysis conducted in accordance with accepted techniques and appropriate guidelines and regulations?
12. Has a reconnaissance study plan been identified? Is it the selected/recommended plan?
13. For environmental restoration efforts, was an incremental analysis accomplished? Was resource significance defined?
14. Is there a rationale for a locally preferred plan or non-NED recommended plan?
15. Does the recommended plan meet the customer's needs and has the position of the sponsor been explicitly conveyed?
16. Have all known benefits been included in the benefit estimate? Have high-priority benefits been identified?
17. Have economic methodologies and assumptions been explained in sufficient detail?
18. Is the evaluation of each alternative based on the difference between the without-project and with-project conditions?
19. Have risk and uncertainty been addressed?
20. Has the necessary coordination been conducted and documented in accordance with the National Environmental Policy Act of 1969 (NEPA) and ER 200-2-2?
21. Have HTRW considerations been addressed?
22. Is the proposed project recommendation consistent with current Administration policies?
23. Does the over-all planning report adequately display study assumptions, findings and clearly represent a firm basis for the recommendation?

QUALITY CONTROL REPORT

SAVANNAH HARBOR EXPANSION PROJECT

TECHNICAL COORDINATOR'S DOCUMENTATION

Meetings Attended by Independent Technical Reviewer

Date	Review Team Member	Issue	MFR Attached
1			
2			
3			
4			

Review Team Comments for Draft and Final Submittals

Date	Review Team Member	Issue	Resolution
1			
2			
3			
4			

Key Items Addressed by Review Team

- a) Validity of technical assumptions
- b) Methods and procedures used in the analyses
- c) Reasonable alternatives were addressed
- d) Appropriateness of data used
- e) Reasonableness of the results and responsiveness to customer needs

Attach any additional comments or formal checklist(s)

Technical Coordinator

Date

QUALITY CONTROL REPORT

SAVANNAH HARBOR EXPANSION PROJECT

CERTIFICATION BY TEAM LEADER & TECHNICAL COORDINATORS

I certify that the study and review process required to be performed under my responsibility has been completed and the technical work is in accord with Corps regulations, standard report requirements, and customer expectations.

Engineering Division Technical Coordinator

Date

Operations Division Technical Coordinator

Date

Real Estate Division Technical Coordinator

Date

Contracting Division Technical Coordinator

Date

Planning Division Technical Coordinator

Date

Technical Review Team Leader

Date

QUALITY CONTROL REPORT

SAVANNAH HARBOR EXPANSION PROJECT

ENDORSEMENT BY THE PM & OFFICE CHIEFS

My staff and I have reviewed the report and the recommendations of the Project Delivery Team. I endorse the report and recommend its signature by the District Commander and its continued processing through the Corps approval process.

Senior Project Manager

Date

Chief, Operations Division

Date

Chief, Real Estate Division

Date

Chief, Contracting Division

Date

Chief Planning Division

Date

District Counsel

Date

Chief, Civil Works Program Manager

Date

Deputy District Engineer (Project Management)

Date

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